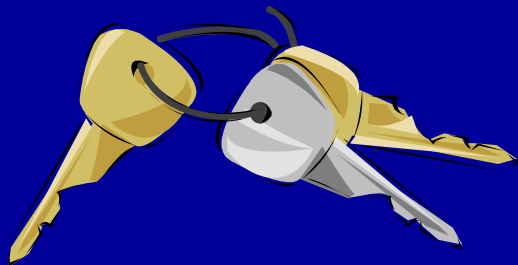


The Pathway from Driver to Passenger: Strategies & Interventions for Enhancing Community Mobility



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“I can barely see,
I can barely hear,
and I can barely walk,
but at least
I can still drive.”

-- *patient as told to his physician*

Travel Mode by Driving Status 65+

	Drivers	Non-Drivers	Total
Car	91.4	65.4	89.0
Driver	72.7	--	66.0
Passenger	18.8	65.4	23.0
Walking	7.1	22.6	8.5
Transit	0.4	8.3	1.1
Bicycle	0.3	0.4	0.4

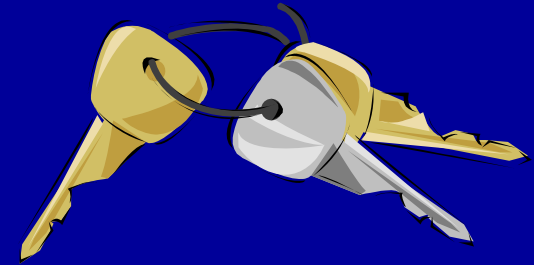
Source: 2001 NHTS, ICF Consulting Analysis in ICF 2006 NCHRP 20-65 Report

Concern for Isolation

“Of all older non-drivers, 54% do not leave their home on a given day, while only 17% of drivers stay home.”

Source: Bailey, L. (2004) Aging Americans: Stranded without Options. Surface Transportation Project.

It is not just about giving up the
keys...



It is about assuring the full range of
community mobility options,
including supportive transportation.

It is about living.

The Issue

- Currently drivers age 65+ comprise 15% of all fatal crash involvements...
- *By 2030, drivers age 65+ are projected to comprise 25% of all fatal crash involvements (Hu et. al, 2000)*
- *...accounting for about 40% of the expected increase in all crash involvements. (Lyman et. al, 2002)*
- *Other projections show fatalities tripling by 2030 (Burkhardt et. al., 1998)*

White House Conference on Aging

December 11-14, 2005

- Resolution #3 (1002 votes)
Ensure that Older Americans Have
Transportation Options to Retain Their
Mobility and Independence
- Resolution #47 (473 votes)
Support Older Drivers to Retain Mobility and
Independence through Strategies to Continue
Safe Driving

It's not about AGE.
It's about functional impairments
that impact critical driving skills.

Many Diseases & Conditions May Impair Driving Skills

- Medication use
- Effects of anesthesia & surgery
- Vision (cataract, macular degeneration, glaucoma)
- Cardiovascular(arrhythmias, CHF, Valvular HD)
- Cerebrovascular (stroke, TIA, etc)
- Neurologic (Brain tumor, Dementia,Migraine, Head injury, Parkinson's,MS, sleep disorders,seizures,etc)
- Metabolic (diabetes, hyper/hypothyroidism)
- Respiratory (COPD, respiratory failure)

Source: NHTSA

Overview of Older Drivers

- More older people—26 million age 70+
- 28 million licensed drivers age 65+
- Driving more miles than ever before
- Driving at older ages than ever before—19 million older licensed drivers in 2001
- More likely to suffer a fatality when in a crash
- Low mileage likely at greater risk
- About 10-15% of older drivers are presumed to be at-risk
- Few alternatives to driving



Driving expectancy is
significantly less than life
expectancy.

We All Should Be Planning For Our Non-driving Years

- Men outlive their ability to drive by 6 years; women outlive their ability to drive by 10 years.
- More than 600,000 people age 70+ stop driving each year

Source: Foley, Heimovitz, Guralnik, Brock (2002). Driving Life Expectancy of Persons Age 70 Years and Older in the United States. *American Journal of Public Health*, 92 (8):1284-1289.

Most older drivers cease or restrict their own driving when they experience changes in their ability to drive.

BUT SOME DON'T...



The New Numbers on Alzheimer's Disease & Related Dementias

- About 5.2 million Americans today
 - 5 million age 65+
 - ~200,000 < 65 with early onset; ~500,000 <65 with AD or other dementia.
- By 2050, estimates range from 11.3 million to 16 million.
- 70% live in community/ ~ 20% live alone.
- 30 - 45% of persons with AD drive, and the majority drive alone.

Source: Alzheimer's Association (2008); Bynum, Rabins, Weller (2004) in Maslow, K. (2004).

Why Driving Is A Concern for Persons with Dementia

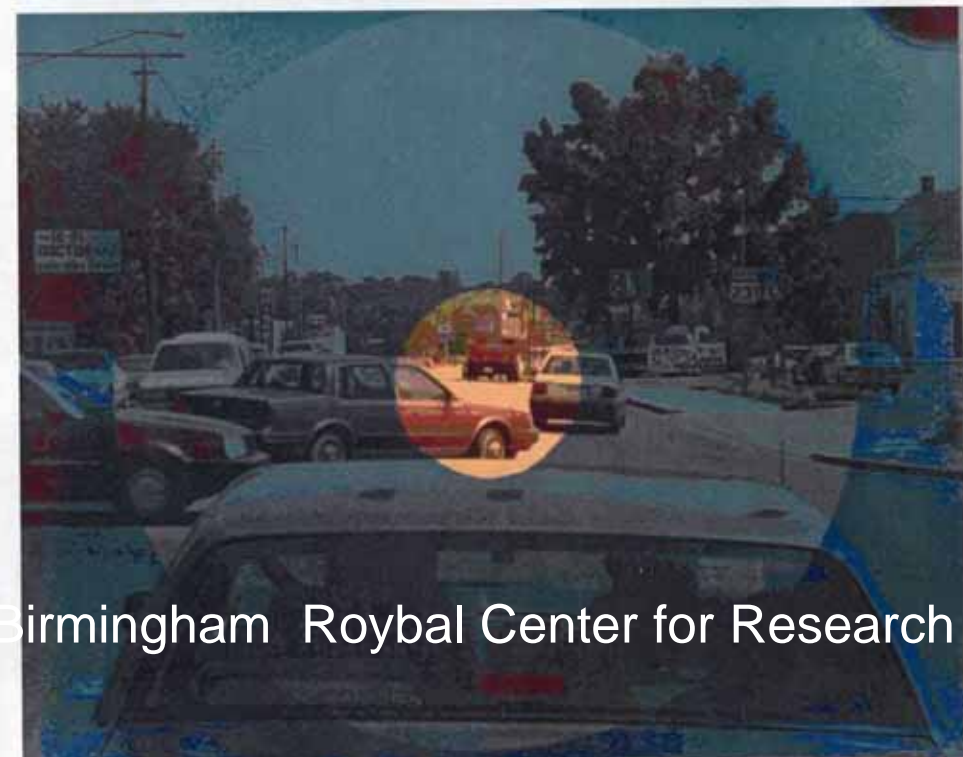
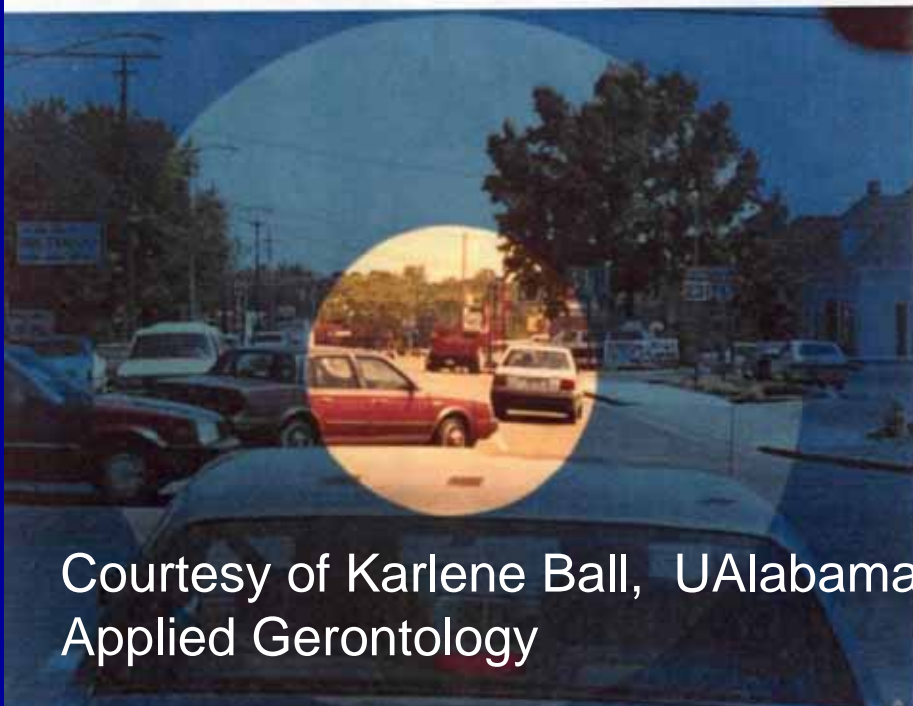
- More crashes
 - Cognitively impaired drivers are 7 times more likely than other drivers to have an at-fault crash (NHTSA, 1998)
- Getting lost
 - 44% of early stage AD patients who drive routinely get lost. • 40% were involved in crashes, a crash risk up to 3-4 times higher than in adults with no cognitive impairment (Lucas-Blaustein et al., 1988).
- Unaware of not being a “responsible driver”

Why UFOV[®] is relevant to Dementia & Driving

“Useful field of view” refers to the area that one can see and cognitively process and interpret. With cognitive slowing, the area shrinks to only the area a person sees directly in front of the eyes without the side vision, called peripheral vision.

“Persons with dementia differ dramatically on UFOV[®] once age is controlled for...Most older adults do very well. Most individuals with mild dementia fail, and all with moderate do [fail].”

Karlene Ball, Director, Center for Research on Applied Gerontology, University of Alabama at Birmingham (July, 2004 correspondence)



Courtesy of Karlene Ball, UAlabama Birmingham Roybal Center for Research
Applied Gerontology

There is no argument
among researchers that at
some point people with the
disease will be unable to
drive safely (*the “argument”
is when*)

Safe navigation and use of public transportation is often difficult for individuals with significant cognitive or physical impairments.



Strategies are needed to help public transportation become more “senior-friendly” overall, and specifically, develop more “dementia-friendly” transit programs.

5A's of the Beverly Foundation *Senior-Friendly Transportation*

- Available,
- Acceptable,
- Accessible,
- Affordable
- Adaptable

Leaders in the Assessment of Supplemental Transportation Programs (STPs) in America.

www.beverlyfoundation.org

How do we start thinking about Supportive Transportation?

- Arm through arm
- Arm to arm
- Chair to chair
- Door thru door
- Rethinking advanced scheduling practices
- Driver training and sensitivity
- Vehicle features to promote safety & comfort

iTNAmerica®

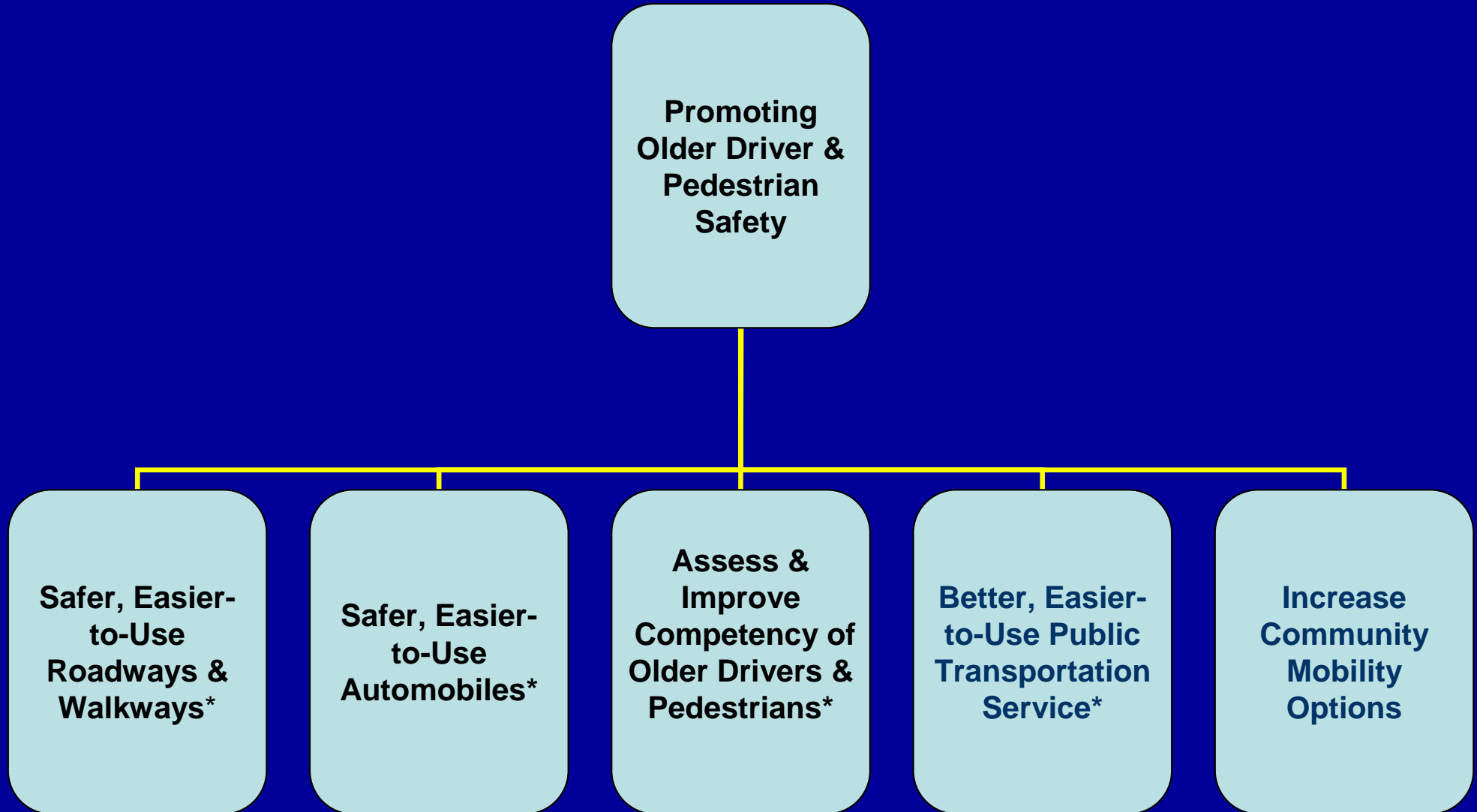
Dignified transportation for seniors



senior mobility.
the quality of our lives is riding on it.

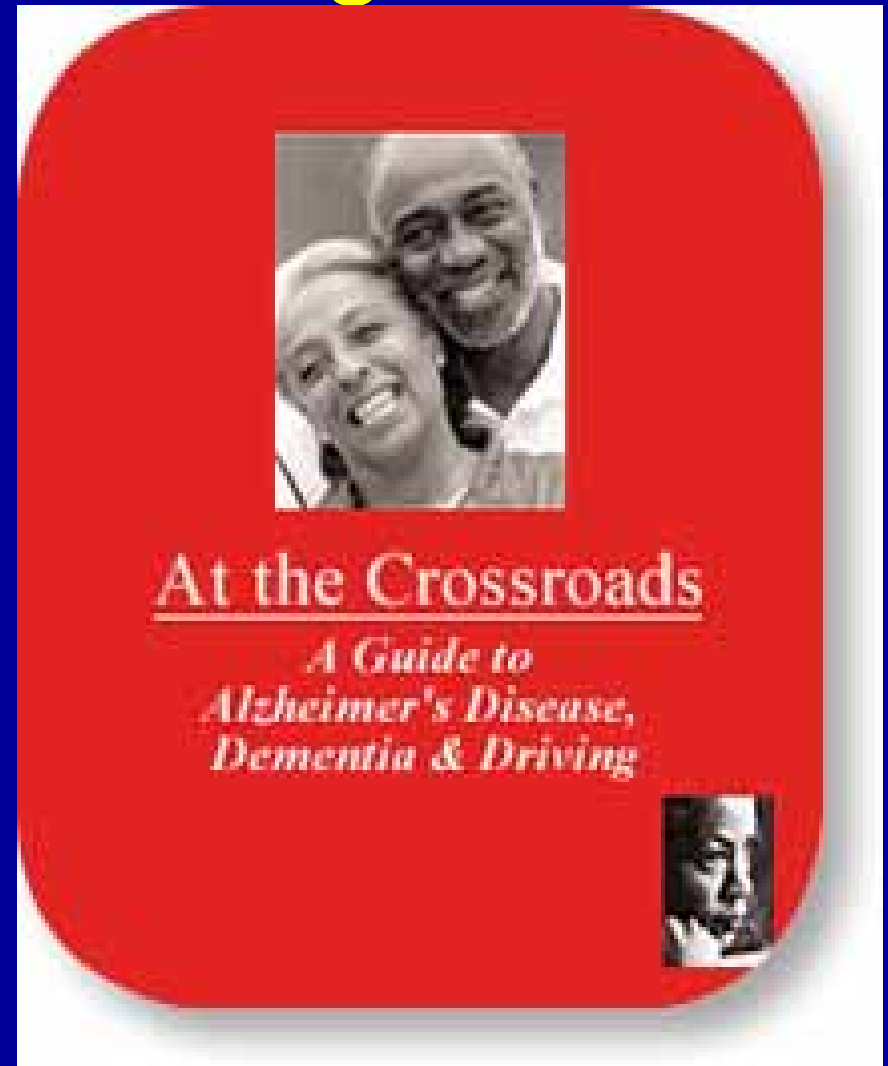
www.itnamerica.org

Opportunities for Community Intervention



*Source: U.S. Department of Transportation (2003). Safe Mobility for a Maturing Society: Challenges and Opportunities. DOT HS 809 745: Author.

Family Conversations & Dementia and Driving



The Hartford/MIT AGELAB partnership



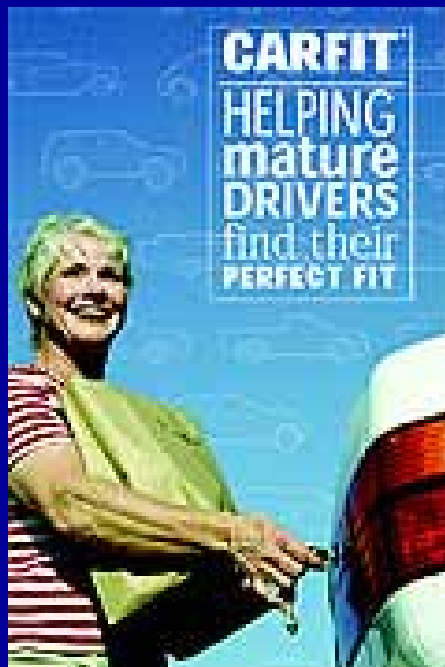
National Initiatives

DRIVEWELL

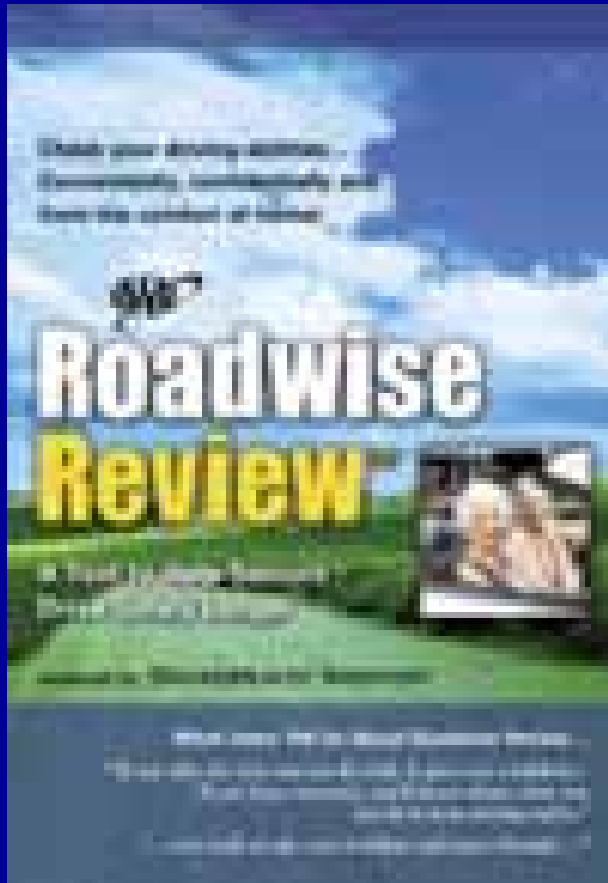
Promoting Older Driver Safety
and Mobility in Your Community

NCST

*National Center on
Senior Transportation*



AAA Foundation Research and Brochures



STP Exchange

Found on the AAA web site at:
<http://www.aaaexchange.com/>

A Few Recommendations for Policy, Research, & Practice

- Strengthen Medical Advisory Boards
- Improve reporting practices
- Develop intervals for reassessment based on evidence-based research
- Explore reimbursement mechanisms for driving assessment
- Provide cessation counseling and I & R on community mobility options
- Promote senior-friendly transportation
- Develop supportive/dementia-friendly transportation options

Don't shy away from this issue—
start *talking* and start *finding*
effective strategies to maintain
dignity for all persons with physical
and/or cognitive impairments while
promoting safe mobility throughout
the lifespan.

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